

ABSTRACT

A novel photovoltaic solar cell and method of making the same are disclosed. The solar cell includes: at least one absorber layer which could either be a lightly doped layer or an undoped layer, and at least a doped window-layers which comprise at least two sub-window-layers. The first sub-window-layer, which is next to the absorber-layer, is deposited to form desirable junction with the absorber-layer. The second sub-window-layer, which is next to the first sub-window-layer, but not in direct contact with the absorber-layer, is deposited in order to have transmission higher than the first-sub-window-layer.